

AMENDMENT UNDER 37 C.F.R. §1.111
APPLN. NO. 10/787,127

DOCKET NO. Q80142
GROUP ART NO. 2822

AMENDMENTS TO THE DRAWINGS

Please replace the current sheets of drawings including Figs. 1-3 and 5-7 with the attached Replacement Sheets including amended Figs. 1-3 and 5-7.

Attachment: Four (4) Replacement Sheets

REMARKS

Claims 1-16 are all the claims pending in the application. Claims 12-16 have been newly added herewith. Claims 4-11 have been withdrawn and claims 1-3 have been examined on the merits.

Specification Objections - Title

The Examiner objects to the title as not being descriptive. Applicants have amended the title in a manner believed to overcome the objection.

Drawing Objections

Initially, the Examiner objects to Figs. 1-3 and 5-7, stating that they should include a “prior art” label. Applicants have amended the Figs. 1-3 and 5-7 in a manner believed to overcome this objection.

The Examiner also objects to the drawings, stating that reference character “202” has been used to designate both a chip and a substrate. However, the drawings use reference character 202 to designate a chip and reference character 201 to designate a substrate. The specification has been amended to correct a typographical error so that it is consistent with the use of the reference characters in the drawings.

The Examiner also objects to the drawing for including reference characters not mentioned in the description. Applicants have amended the specification to include the reference characters shown in the drawings.

Therefore, the objections are believed to be overcome.

Claim Rejections - 35 U.S.C. § 103

Claims 1-3 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Inaba (U.S. Patent Publication No. 2001/0040793) in view of Forthun (U.S. Patent No. 6,473,308). Applicants respectfully traverse this rejection.

The Examiner asserts that Inaba teaches every feature of claim 1 except for a plurality of chip pins arranged in a predetermined pattern and attempts to correct this deficiency with Forthun. The Examiner asserts that one of ordinary skill in the art would have modified Inaba with Forthun because it would aid in providing alignment. However, Inaba and Forthun are substantially different and one of ordinary skill would not have modified Inaba with Forthun to provide an improved alignment as suggested by the Examiner.

Forthun teaches a plurality of semiconductor chip packages 10 which include an integrated circuit chip 48 wrapped in a flexible substrate 14. After the chip 48 is wrapped in the flexible substrate 14 to form a package 10, the packages are stacked in a chip stack 68, as shown in Fig. 9. As motivation for modifying Inaba with Forthun, the Examiner points to column 2, lines 1-7 of Forthun. The text cited by the Examiner explains that the Forthun device is advantageous in maintaining alignment of the chip packages in the stack. However, this alleged motivation is deficient at least because Inaba does not have multiple chip packages with individual substrates which are stacked. Because Inaba lacks stacked chip packages similar to Forthun, the improved alignment for stacked chip packages taught by Forthun is irrelevant to Inaba.

Furthermore, the purpose of the Forthun alignment is not necessary in Inaba. Forthun includes multiple chip packages 10 which each include a chip 28 and an individual substrate 14. In order to connect these multiple chip packages 10, each with their own substrate 14, Forthun requires specific alignment. In contrast, Inaba teaches a single substrate 2 upon which multiple chips 3 are mounted. Because each chip 3 is mounted to the same substrate 2, their connection is not dependent upon any particular alignment. Accordingly, the Examiner's alleged motivation for modifying Inaba with Forthun is improper and claim 1 is allowable over the Examiner's combination.

Claims 2 and 3 depend from claim 1 and are therefore allowable at least because of their dependency.

New Claims

Claims 12-16 have been added in order to provide a more varied scope of protection. Claims 12-16 depend from claim 1 and are therefore allowable at least because of their dependency.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.


Respectfully submitted,

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